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BARRIER UNITS AND ARTICLES MADE THEREFROM

RELATED APPLICATIONS

This is a continuation-in-part of pending Application No. 08/533,589, filed September 25, 1995, now patent number 6,991,124.

BACKGROUND OF THE INVENTION

5 1. Field of the Invention

The present invention relates to barrier units and to articles made therefrom. More particularly, this invention relates to various constraining bands of high strength and low weight for containing articles such as logs or containers. Most particularly, this invention relates to blast resistant container assemblies for receiving explosive articles and preventing or minimizing damage in the event of an explosion. These container assemblies have utility as containment and transport devices for hazardous materials such as gunpowder and explosives, e.g., bombs and grenades, particularly in aircraft where weight is an important consideration, and more particularly in the cargo holds and passenger cabins of the aircraft. They are also particularly useful to bomb squad personnel in combating terrorist and other threats.

15 2. The Prior Art

In response to the 1988 terrorist bombing of a Pan American flight over Lockerbie, Scotland, experts in explosives and aircraft-survivability techniques 20 have studied ways to make commercial airliners more resistant to terrorist bombs. One result of these studies has been the development and deployment of new 25 generations of explosive detection devices. As a practical matter, however, there remains a threshold bomb size above which detection is relatively easy but below which an increasing fraction of bombs will go undetected. An undetected bomb likely would find its way into luggage either carried on board (in cabin) by a 30 passenger or stored in an aircraft cargo container. Cargo containers, shaped as cubic boxes with a truncated edge, have typically been made of aluminum, which is lightweight but not explosion-proof. As a consequence, there has been tremendous focus in recent years on redesigning containers to be both blast resistant to bombs that are below this threshold size and lightweight.